I claim:

1. An apparatus for servicing a telephone call made in a telecommunications network, comprising:

an interconnect bus;

a database for storing information relating to the telephone call, said database in communication with said interconnect bus; and

a communications unit in communication with a plurality of interconnected network in the telecommunications network and in communication with said interconnect bus,

wherein said communications unit instructs the network elements as to routing of the calls originating at the network elements and wherein information associated with each call is transmitted to said communications unit for storage in said database.

2. An apparatus for servicing a telephone call made in a telecommunications network, comprising:

an interconnect bus;

a database for storing information relating to the telephone call, said database in communication with said interconnect bus; and

a communications unit in communication with a plurality of interconnected network in the telecommunications network and in communication with said interconnect bus,

wherein information associated with each call is transmitted to said communications unit for storage in said database and wherein said communications unit creates a record of the calls originating at the network elements for billing purposes.

3. An apparatus for servicing a telephone call made in a telecommunications network, comprising:

an interconnect bus;

a database for storing processing and routing information relating to the telephone call, said database in communication with said interconnect bus;

a plurality of instructions specifying functions of the apparatus;

a processor in communication with said interconnect bus;

a communications unit in communication with a plurality of interconnected network elements in the telecommunications network and in communication with said interconnect bus; and

an information packet associated with the telephone call, said information packet containing data which supports one of the functions of the apparatus, said information packet being transmitted from at least one of the plurality of interconnected network elements to said communications unit.

4. The apparatus for servicing a telephone call according to claim 3, wherein said information packet comprises a message part and a transaction part, the message part being transmitted between the interconnected network elements in response to the call traversing the network elements, the transaction information part being appended to the message part prior to said information packet being transmitted from at least one of the plurality of interconnected network elements to said communications unit.

5. The apparatus for servicing a telephone call according to claim 3, wherein said database identifies one of the plurality of network elements responsible for processing and routing the call.

6. The apparatus for servicing a telephone call according to claim 3, wherein at least one of the plurality of interconnected network elements routes the call based on the information contained in a first message sent to the network element by said communications unit.

7. The apparatus for servicing a telephone call according to claim 3, wherein said plurality of instructions comprises:

means for detecting when an error has occurred during set-up of the call; and

means for placing a test call being initiated and answered by said communications unit, so that the apparatus can determine where the error occurred.

8. The apparatus for servicing a telephone call according to claim 7, wherein one of the plurality of network elements responsible for routing the call differentiates between the test call being initiated and answered by the communications unit and a normal call being placed by a telecommunications network subscriber.

9. The apparatus for servicing a telephone call according to claim 8, wherein one of the plurality of network elements responsible for routing the call has means for indicating to a next succeeding network element that the test call is being placed.

10. The apparatus for servicing a telephone call according to claim 9, wherein the means for indicating to the next succeeding network element that the test call is being placed comprises a signal contained within a second message.

11. The apparatus for servicing a telephone call according to claim 3, further comprising:

means for recognizing and responding to speech in communication with said communications unit, so that a customer may communicate with a telecommunications provider in an interactive manner.

12. The apparatus for servicing a telephone call according to claim 11, wherein said plurality of instructions comprises means for providing the customer with new services in response to the interactive communication.

13. The apparatus for servicing a telephone call according to claim 3, wherein said communications unit communicates with a work station managed by a case worker, the case worker simultaneously interacting with said communications unit, the plurality of interconnected network elements, and a customer of the telecommunications provider simultaneously.

14. The apparatus for servicing a telephone call according to claim 3, wherein said plurality of instructions comprises means for placing a test call being initiated and answered by said communications unit, the test call being placed when a telecommunications customer requests billing verification information.

15. The apparatus for servicing a telephone call according to claim 3, wherein said database comprises a data table containing a list of numbers identifying phone numbers of calling parties which have been marked for fraud.

16. The apparatus for servicing a telephone call according to claim 15, wherein said plurality of instructions comprises means for determining whether a calling party's phone number has been marked for fraud.

17. The apparatus for servicing a telephone call according to claim 3, wherein said database comprises a data table containing a list of numbers identifying phone numbers of calling parties which have been marked for accumulated billing charges.

18. The apparatus for servicing a telephone call according to claim 17, wherein said plurality of instructions comprises means for determining whether a calling party's phone number has been marked for accumulated billing charges.

19. The apparatus for servicing a telephone call according to claim 3, wherein said plurality of instructions comprises means for determining call processing and routing

through the plurality of interconnected network elements for the call.

20. The apparatus for servicing a telephone call according to claim 3, wherein said plurality of instructions comprises means for detecting patterns of abuse of the telecommunications network.

21. The apparatus for servicing a telephone call according to claim 3, wherein said plurality of instructions comprises means for collecting data representing calling activity at each of the plurality of interconnected network elements.

22. The apparatus for servicing a telephone call according to claim 3, wherein said plurality of instructions comprises means for preparing a call detail record for the call based on the data contained in said information packet.

23. An apparatus for servicing a telephone call made in a telecommunications network comprising:

an interconnect bus;

a first database for storing processing and routing information relating to the telephone call, said first database in communication with said interconnect bus;

a plurality of processors in communication with the interconnect bus, said processors having instructions specifying functions of the telecommunications network;

a switching and signaling unit in communication with a plurality of interconnected network elements in the telecommunications network and in communication with said interconnect bus;

an information packet associated with the telephone call, said information packet containing data which supports said functions of the apparatus, said information packet being transmitted from at least one of the plurality of interconnected network elements to said switching and signaling unit, and being stored in a second database.

24. An apparatus for servicing a telephone call, comprising:

means for communicating with a plurality of interconnected network elements associated with a telecommunications network;

means for collecting an information packet associated with the telephone call, the information packet being transmitted from the interconnected network elements to said means for communicating with the plurality of interconnected network elements; and

means for routing of the call based on a signal within a message transmitted from the means for communicating to at least one of the interconnected network elements.

25. An apparatus for servicing a telephone call, comprising:

means for communicating with a plurality of interconnected network elements associated with a telecommunications network;

means for collecting an information packet associated with the telephone call, the information packet being transmitted from the interconnected network elements to said means for communicating with the plurality of interconnected network elements; and

means for storing the information packet, the stored information packet being used for creating a billing record of the call.

26. A method of recording information generated by a plurality of interconnected telecommunications network elements in response to a call traversing the network elements, comprising:

transmitting to an originating network element a message generated by one of the plurality of interconnected network elements;

copying the transmitted message;

forwarding the message to a succeeding interconnected network element;

appending transaction information to the copied message having an error signal indicating whether an error was detected in the transmitted message, so that the transaction information and the copied message form an information packet;

forwarding the information packet to a communications unit in communication with the first network element; and

storing the forwarded information packet in a database so that a record of each call is formed.

27. The method according to claim 26, further comprising:

monitoring the information packet forwarded by the originating network element to detect the presence of the error signal, the error signal indicating that the call failed;

determining a called number associated with the failed call;

appending a prefix to the called number so that the communications unit becomes a called party instead of a party associated with the original called number, the communications unit providing for answering and release of the call;

redialing the prefixed called number, a test call initiated and answered by the communications unit thereby being placed;

traversing by the test call of the same network elements which were traversed by the failed call;

embedding a signal into the messages generated by each one of the plurality of interconnected network elements traversed by the test call, indicating to a next succeeding network element that the test call associated with the failed call is being placed; and

forwarding to the communications unit by each one of the plurality of interconnected network elements traversed by the test call a representation of all generated and received messages, so that a complete set of data about each failed call used for identifying a problem which resulted in call failure is formed.

28. The method according to claim 27, wherein the prefixed called number is redialed automatically by the communications unit.

29. The method according to claim 27, wherein the prefixed called number is redialed by a case worker.

30. The method according to claim 27, wherein the prefixed called number is redialed by computer test equipment which verifies transmission quality of the call.

31. The method according to claim 26, further comprising:

extracting the error signal from the message forwarded to the communications unit to determine a cause of the problem resulting in call failure;

identifying at least one of the plurality of interconnected network elements associated with the error signal; and

instructing the identified element to correct the error.

32. The method according to claim 26, further comprising:

determining a called number associated with the call;

appending a prefix to the called number so that the communications unit becomes a called party instead of a party associated with the original called number, the communications unit providing for answering and release of the call;

redialing the prefixed called number by a case worker, a test call initiated and answered by the communications unit thereby being placed;

traversing by the test call of the same plurality of interconnected network elements which were traversed by the failed call;

embedding a signal into the messages generated by each of the plurality of interconnected network elements traversed by the test call, indicating to a next succeeding network element that the call is the test call; and

forwarding to the communications unit by each of the plurality of interconnected network elements traversed by the test call a representation of all generated and received messages associated with the network elements, so that a complete set of data about the call used for demonstrating the accuracy of the billing process to a customer is formed.

33. The method according to claim 26, further comprising:

utilizing the information packets associated with the calls placed from a particular phone number to detect patterns of abuse of the telecommunications network.

34. A method of establishing a through path for a call which traverses a plurality of interconnected network elements within a telecommunications network, comprising:

detecting by an originating network element a request message indicating that the call has been initiated;

copying the request message;

forwarding the request message to succeeding interconnected network elements in the through path;

appending a set of transaction information to the copied request message, so that the transaction information and the copied request message form an information packet;

including in the information packet an indication that the originating network element desires instructions regarding processing and routing of the call;

forwarding the information packet from the originating network element to a communications unit; and

utilizing a database in communication with the communications unit to determine the required processing and routing of the call based on the contents of the information packet.

35. The method according to claim 34, further comprising:

transmitting a message from the communications unit to the originating network element indicating how to process and route the call.

36. The method according to claim 34, further comprising:

transmitting a message from the communications unit to a second network element indicating that the second network

element should notify the originating network element how to process and route the call.

37. The method according to claim 36, further comprising:

extracting a calling party's phone number from the information packet forwarded to the communications unit;

looking up the calling party's number in a database which contains phone numbers which have been marked for fraud to determine whether the calling party's number has been marked for fraud; and

forwarding a message requesting call termination to the originating network element if the calling party's number has been marked for fraud.

38. The method according to claim 36, further comprising:

extracting a calling party's phone number from the information packet forwarded to the communications unit;

looking up the calling party's number in a data table which contains numbers which have been marked for accumulated billing charges exceeding a threshold; and

forwarding a message requesting call termination to the originating network element if the calling party's number has been marked for accumulated billing charges exceeding the threshold.

39. The method according to claim 38, wherein the accumulated billing charges are associated with an abnormally long call being served by the telecommunications network.

40. The method according to claim 36, wherein the through path terminates at the communications unit, so that a customer of the telecommunications network may subscribe to new services automatically by communicating directly with the communications unit.

41. The method according to claim 40, further comprising:

routing the call to the communications unit;

connecting the customer to a speech recognition and voice response unit in communication with the communications unit;

recording of the customer's request for subscription to new services by the speech recognition and voice response unit;

extracting the customer's phone number from the information packet forwarded to the communications unit;

looking up the customer's phone number in a data table to determine whether the calling party's number has been marked for fraud or non-payment; and

informing the customer of the status of the request for subscription to new services.

42. A method of establishing a through path for a call which traverses a plurality of interconnected network elements within a telecommunications network, the method comprising:

detecting by a first network element a request message indicating that the call has been initiated;

copying the request message;

forwarding the request message to a succeeding network element;

appending a set of transaction information to the copied request message detected by the first network element, so that the transaction information and the copied request message form an information packet;

including in the information packet an indication that a second network element is seeking instructions regarding processing and routing of the call;

forwarding the information packet from the first network element to a communications unit in communication with the first network element;

utilizing a database in communication with the communications unit to determine required processing and routing of the call based on the contents of the forwarded information packet;

transmitting a message from the communications unit to the second network element indicating how to process and route the call; and

correlating the request message with the transmitted message indicating the processing and routing instructions for the call by the second network element.

43. The method according to claim 42, wherein the second network element comprises an originating network element responsible for controlling the call set-up.

44. The method according to claim 43, further comprising:

transmitting messages generated by each of the plurality of interconnected network elements traversed during the call set-up to the originating network element;

copying the transmitted messages;

appending a set of transaction information to the copied messages, so that the transaction information and the copied messages form information packets;

forwarding the information packets from the originating network element to the communications unit;

correlating the information packet associated with the request message forwarded from the first network element with the information packets associated with the messages forwarded from the originating network element; and

storing the information packets pertaining to a particular call in a database so that a set of data about each call used for supporting the functions of the telecommunications network is formed.